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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/803,199

03/18/2004

Robert A. Slimak

TPP/J/885RE

4834

7590 04/05/2007  
Stevens, Davis, Miller & Mosher, L.L.P.  
1615 L Street, N.W., Suite 850  
Washington, DC 20036

EXAMINER

PADGETT, MARIANNE L

ART UNIT

PAPER NUMBER

1762

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/05/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/803,199	<b>Applicant(s)</b> SLIMAK ET AL.	
	<b>Examiner</b> Marianne L. Padgett	<b>Art Unit</b> 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 7/21/2004 & 3/18/2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/21/04</u> .   | 6) <input type="checkbox"/> Other: _____                          |

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1. The reissue oath/declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following:

The reissue oath fails to comply with all the requirements of 37 CFR 1.63(a) & (b), specifically as discussed in MPEP 1414-IV on page 1400-34, the oath fails to state that the applicants for the reissue "believed that the named inventor or inventors to be the original and the first inventor or inventors of the subject matter for which is claimed and for which a patent is sought".

It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56. Applicant's oath uses the phrase "...which is material to the examination of this reissue application...", which is subtly different than the required language, hence "examination" needs to be corrected to "patentability" in the oath.

Claims 1-11 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the declaration is set forth in the discussion above in this Office action.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims one & 7-18 of U.S. Patent No. 6,146,766. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending patent (766) is directed to a process of overlapping scope, which while the independent claim is narrower than the present claim 1, fully encompasses the present claim, such that they are obvious variations with the other patent also requiring use of alternate vacuuming pressure to effect penetration of the cellular cell walls by the solution, a limitation which is neither excluded nor required by the present claims, however is related to present dependent claim to which more generically claims pressure treating. It is noted that the product by process claims in both application recite analogous properties.

With respect to the specific alkali metal silicate of sodium silicate, the alkali metals are a small group of which sodium is one of the most commonly used members, hence it would've been obvious to one of ordinary skill in the art having been taught to use alkali metal to choose any one of those especially the commonly employed once such a silicate with the expectation of the being effective. The particular concentration of sodium silicate in a solution would have been expected to be determined by routine experimentation, dependent on the particular cellulosic material, the ease of include infusing the solution therein & the amount of sodium silicate necessary to impart the desired degree of fire retardant and moisture resistant properties.

With respect to drying after the application step, as one of ordinary skill in the art would recognize that it is highly unlikely that they treated cellulose material would have been kept eternally wet, hence it would have been obvious to dry the cellulosic material at some time after application of the solution with the expectation that the eventual use of the material will be in and at least partially dry state. Alternately, the application of energy common to both sets of claims, would have been expected to effect some degree of trying as energy input generally causes evaporation or enhances sublimation of any

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solvents present. It is further noted that drying via use of radiant heat, would be inclusive of leaving the cellulosic material exposed to the sun, which would permit to use a radiant heating effect, and hence speed the drying, a process that would've been obvious to one of ordinary skill in the art for drying cellulosic substrates such as lumber, especially considering that lumber is frequently stored outdoors, thus is frequently exposed to the sun as a matter of course.

4. Claims 1-11 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2-4, 8, 11-12, 15-16, 23-25 & 44-52 of copending Application No. 10/870,985. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application (985) is directed to a process of overlapping scope, where limitations are claimed in different orders, with claims of the (985) case being directed to the more specific form of cellulose being would, plus the more specific claim of sodium silicate, including claimed concentrations, such that they are obvious variations with the other patent. It is noted that the product by process claims in both application will produce analogous structures.

With respect to drying after the application step, as one of ordinary skill in the art would recognize that it is highly unlikely that they treated cellulose material would have been kept eternally wet, hence it would have been obvious to dry the cellulosic material at some time after application of the solution with the expectation that the eventual use of the material will be in and at least partially dry state. Alternately, the application of energy common to both sets of claims, would have been expected to effect some degree of trying as energy input generally causes evaporation or enhances sublimation of any solvents present. It is further noted that drying via use of radiant heat, would be inclusive of leaving the cellulosic material exposed to the sun, which would permit to use a radiant heating effect, and hence speed the drying, a process that would've been obvious to one of ordinary skill in the art for drying cellulosic substrates such as lumber, especially considering that lumber is frequently stored outdoors, thus is frequently exposed to the sun as a matter of course.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1-11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,827,984 B2 in view of Crews, IV et al. (5,672,390).

The claims of the (984) patent are broader in that they more generally refer to a "combustible material" instead of a "cellulosic material" of the present invention, however cellulosic material is a subset of combustible materials, and both materials were being treated to effect infusion of a silicate solution to create fire resistant properties with overlapping water solubility of the energy/heat treated silicate. The (984) claims also more generally refer to a silicate solution instead of alkali metal silicate solution, but provide a more detailed discussion of the effects of the heating process, which narrower heating treating limitations are encompassed by the broader limitations of the present application. With respect to the narrow limitations of the present claims, to particularly use alkali metal or sodium silicates, on the narrow set of materials of cellulosic materials, it would've been obvious to one of ordinary skill in the art on performing the process of the (984) claims to use combustible materials such as would, as they are well known cellulosic combustible materials, and to employ the specific silicate solution as one containing sodium silicate, because Crews, IV et al. (390; see abstract, col. 5, lines 58-65; an example 4 on col. 11-12) teach forming a protective layer, that may protect against heat in fire, on surfaces such as would be a process that includes impregnation of wood with the sodium silicate solution, hence providing further motivation to protect wood in the (984) claimed process, and further providing a specific example of sodium silicate as an effective silicate for fire retardant purposes, which would motivate one to use it in the (984) process.

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It is noted that the (984) claims apply heat = energy to dehydrate = dry, however cruise, IV et al. provides further motivation for applying heat to affect drying, but differs from the present & (984) claims by employing an acid solution to finish their processing to effect the fire retardant wood product.

6. Applicants' IDS is made of record, however it is noted that no copy of the cited wretch that document was found hence it could not be reviewed, nor could full faith and credit be given to previous examination, since it did not appear to have been cited in the parent case.

7. Other art of interest to the state-of-the-art, but which is not prior art includes Ray (6,586,109 B2); Grantham et al. (6821631 B2 & 2001/0023026 A1); Kelsoe (2002/0110644 A1 & 2003/0059545 A1); and Thole et al. (2006/0163769 A1).

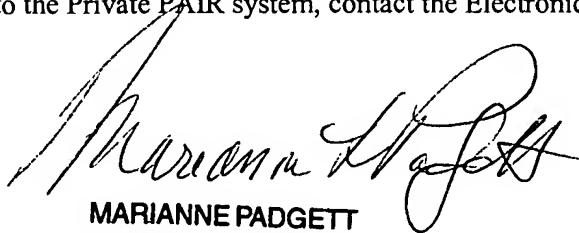
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne L. Padgett whose telephone number is (571) 272-1425. The examiner can normally be reached on M-F from about 8:30 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks, can be reached at (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MLP/dictation software

9/30/2006 & 4/3/2007

  
MARIANNE PADGETT  
PRIMARY EXAMINER